

1   **WHAT IS CLAIMED IS:**

2           1. A driver information feedback and display system comprising:  
3           multiple image capture units (11-13) disposed at a front end and a rear  
4           end of a vehicle to capture exterior peripheral scenes of the vehicle;  
5           a data display unit (20) for outputting video images fed from the left and  
6           right front image capture units (11,12) and the rear image capture unit (13);  
7           a channel/window manager (10) for controlling window splitting and  
8           view switching through the control of video channels, having multiple video  
9           input ports respectively connected to left and right front image capture units  
10          (11,12) and rear image capture unit (13), and an output port to the data display  
11          unit (20) for video output; and  
12          a controller (30) being connected to all the components mentioned above  
13          to act as the control center, and controlling the window display mode through  
14          control of video input and output.

15          2. The driver information feedback and display system as claimed in  
16          claim 1, wherein the left and right front image capture units (11,12) are  
17          embedded in left and right head lamp sets of the vehicle.

18          3. The driver information feedback and display system as claimed in  
19          claim 1, wherein the rear image capture unit (13) is a micro-camera with a  
20          wide-angle lens.

21          4. The driver information feedback and display system as claimed in  
22          claim 1, wherein the controller (30) is further linked to a speed recorder (40),  
23          such that when the vehicle speed drops to a preset level, the controller (30) will  
24          automatically activate the left and right front image capture units (11,12) for full

1 scanning.

2 5. The driver information feedback and display system as claimed in  
3 claim 1, wherein the controller (30) is further linked to a backing sensor (50) for  
4 obstacle detection and distance estimation.

5 6. The driver information feedback and display system as claimed in  
6 claim 4, wherein the controller (30) is further linked to a backing sensor (50) for  
7 obstacle detection and distance estimation.

8 7. The driver information feedback and display system as claimed in  
9 claim 1, wherein controller (30) is further linked to a GPS unit (60), such that an  
10 electronic map is displayed on the screen of the data display unit (20) by window  
11 splitting for tracking the current location and charting the electronic map  
12 dynamically through the synchronous satellite services.